

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

The Examiner has rejected claims 1, 2, 4-7 and 11-14 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 7,217,266 to Anderson et al. The Examiner has further rejected claims 1, 2 and 3-14 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0034319 to Anderson et al. in view of U.S. Patent 5,628,744 to Coleman et al.

The Anderson et al. patent discloses an apparatus and method for laser treatment with spectroscopic feedback, in which an imaging system uses single or plurality, monochromatic or multi-wavelength (e.g., white light) lights for imaging an area of skin to be treated, a computer vision and control system analyzes the images and generates control signals, and a treatment system uses, for example, a laser to perform the actual treatment under control of the generated control signals.

Claim 1 includes the limitations "A device for reducing growth of hairs on human skin, said device comprising:

a source of electromagnetic radiation that emits electromagnetic radiation in a wavelength range between 550 and 1200 nm, said electromagnetic radiation being directed toward the skin being treated;

a sensor for analyzing a reflection from the skin of the emitted electromagnetic radiation in order to determine selected properties of the skin being treated; and

control means for controlling source of electromagnetic radiation to limit the deliverable energy density of the electromagnetic radiation on the skin to a maximum value between 1 and 12 J/cm², the control means selecting the maximum value in accordance with the selected properties determined by the sensor."

As noted in MPEP §2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner indicates that:

"Anderson et al. disclose apparatus and method of use for dermatological treatment, the apparatus comprising: an imaging system, a control system, and a treatment system. The imaging system includes an 2-D sensor or a camera for real-time detection of the target tissue parameter(s) and for generating a feedback signal to the control system. The control system receives a feedback signal from the detector/imaging system and in turn adjusts parameters of the treatment energy based on the desired treatment (see Figs. 8A, 88, 13; and claims 1, 2, 19 and 20).

"Anderson et al. teach that the imaging and control system are configured to extract in real-time the features of the target tissue (e.g., for hair removal, see Figs. 32A-32D and col. 6, lines 15-32). They

further teach that the treatment energy source is selected from monochromatic light sources and broadband light sources generating pulsed or cw light beams (see col. 11, lines 17-2). The treatment light and/or probe beam is/are directed to desired tissue site and the detector system monitors a light reflected from the tissue site to determine the tissue parameters as claimed.

"Anderson et al. further teach that the treatment energy has a wavelength selected from the wavelength range of between 488 nm to 1064 nm; energy density of 1-10 J/cm²; and pulse duration of between 1-10 ms (see Fig. 5; col. 31, lines 45-49; and col. 34, lines 13-14)."

While what is stated by the Examiner is correct, Applicants note that in Anderson et al. imaging system includes its own light source, and the skin-reflected light from this separate light source is being detected in the imaging system to create the images being processed by the computer vision and control system to generate the control signals for controlling the treatment system which uses laser radiation from a source different from the light source of the imaging system.

In the subject invention, reflection from the skin of the electromagnetic radiation used for the treatment, is used to generate the control signals for controlling this same electromagnetic radiation. As such, the effects of the electromagnetic radiation treatment are directly detected and controlled.

Applicants therefore submit that Anderson et al. neither discloses nor suggests "a sensor for analyzing a reflection from the skin of the emitted electromagnetic radiation in order to

determine selected properties of the skin being treated", as clearly set forth in claim 1.

The Anderson et al. publication discloses a method and apparatus for hair growth management, in which the hair, along with the patient's skin, is subjected to low energy optical radiation, the radiation having certain properties.

The Coleman et al. patent discloses a treatment beam handpiece, in which a low power probe beam is directed to the skin, and its reflection is detected and analyzed, to determine when the handpiece is in the vicinity of a "lesion". At that point, a treatment beam is then directed to the patient's skin.

The Examiner has indicated that "Anderson et al. does not teach a feedback contro comprising a sensor for measuring light reflected from the skin". The Examiner then indicates "Coleman et al. teach an alternative dermatological apparatus and method of use, the apparatus comprising a treatment light source for applying treatment light to a desired tissue site, a reflectance sensor for monitoring light reflected from the treatment site for monitoring tissue related parameters, and a control system for adjusting parameters of the treatment light based on the detected tissue parameters as claimed (see the abstract, Figs. 3-5, col. 6, line 20+, and claims 1-4). Coleman et al. further teach that the device may be used for the treatment of hair follicles (see col. 4, lines 66-67). With respect to claim 9 of the instant application, the apparatus of Coleman et al. comprises a sensor system 58 for

detecting the speed of the apparatus over the treatment site to adjust the treatment energy accordingly (see col. 5, lines 52-59)."

Applicants first would like to point out that the sensor of the subject invention analyzes "a reflection from the skin of the emitted electromagnetic radiation in order to determine selected properties of the skin being treated". As such, the sensor of the subject invention detects reflection of the treatment beam, not just light.

Applicants further submit that what is being detected in Coleman et al. is the reflection of a low power probe beam as opposed to the reflection of the actual treatment beam.

Applicants therefore submit that the combination of the Anderson et al. publication and Coleman et al. neither discloses nor suggests "a sensor for analyzing a reflection from the skin of the emitted electromagnetic radiation in order to determine selected properties of the skin being treated" and "ontrol means for controlling source of electromagnetic radiation to limit the deliverable energy density of the electromagnetic radiation on the skin to a maximum value between 1 and 12 J/cm², the control means selecting the maximum value in accordance with the selected properties determined by the sensor."

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1, 2 and 4-14, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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